IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
WESTERN DIVISION

DURAMAX, INC.,

Plaintiff,

Case No. 3:03 CV 7571

-vs-

ROPPE CORPORATION,

FINDINGS OF FACT
AND
CONCLUSIONS OF LAW

Defendant.

KATZ, J.

This matter is before the Court for findings of facts and conclusions of law following a bench trial. Also before the Court are the parties' post-trial briefs and responses[1] thereto. This Court has jurisdiction pursuant to 28 U.S.C. § 1331. Pursuant to Fed. R. Civ. P. 52(a), the Court sets forth the following findings of facts and conclusions of law.

FINDINGS OF FACT

A. Historical and Procedural Background

1. Plaintiff, Duramax, Inc. ("Duramax" or "Plaintiff"), is an Ohio corporation. Since 1997, Duramax has manufactured and sold a subfloor leveler product through its Johnsonite division, which is based in Chagrin Falls, Ohio.

2. Defendant Roppe Corporation ("Roppe" or "Defendant") is an Ohio corporation with its principal place of business in Fostoria, Ohio.

3. Duramax/Johnsonite and Roppe are competitors in the commercial specialty resilient floor coverings and floor accessory products business, which includes products such as wall base, rubber

[1] This includes Defendant's supplemental post-trial submission (Doc. No. 101), Plaintiff's reply (Doc. No. 102), and Defendant's response (Doc. No. 103).

and vinyl stair treads and other stairwell management products, transitions, reducers and rubber floor tile along with other specialty products. Both companies sell their products through a distributorship system.

4. In the early 1990s, Johnsonite began working with Frank Pelosi, Jr. ("Pelosi"), a flooring contractor from Morristown, New Jersey. Pelosi obtained a patent for a Tight Lock Cover Base product and provided Johnsonite with a license to commercially manufacture and market the patented product. In connection therewith, Pelosi entered into an agreement with Johnsonite pursuant to which Johnsonite had a right of first refusal on any new products invented by Pelosi. Pursuant to that right of first refusal, in December 1995, Pelosi presented Johnsonite with a new invention which he called a patching board. This invention was designed to solve a problem encountered by flooring installers when they were presented with two adjacent subfloors of differing heights.

5. Throughout 1996, Pelosi worked on refining his solution and testified as to how he settled on the concept of ridges:

> A. Basically in talking with Jerry Glatz from Johnsonite, I explained to him that we wanted some sort of texture up on top. We discussed that the least expensive way to do that would either be to do it in the mold or to have something that would apply some texture to it - - when I say the "mold", I mean the invention die - - and that the absolute least expensive way to do it would be in the - - die itself. So I suggested to him after we discussed a couple of things, I said, look, how about just give me what is on the back of standard vinyl base that they produce. They're little ridges that come out of the die itself, very similar to what's on the 5 '923 patent. They made me a prototype and sent it. I looked at it and said, That is great. This is just what we want. And we went from there. (Tr. Pp.647-648.)

6. In November of 1996, Duramax engaged attorney D. Peter Hochberg ("Hochberg") to obtain a patent for Mr. Pelosi's invention. Hochberg engaged the firm of Brown and Cano in Arlington, Virginia to do a patentability search to identify any relevant prior art for the potential patent. In mid-

December 1996, the Brown firm completed the patentability search and advised Hochberg of the relevant prior art revealed by their patent search.

7. On February 18, 1997, Pelosi assigned all rights in the invention to Duramax. On February 19, 1997, Hochberg applied for a patent on the subfloor leveling product which is the subject of this suit.

8. A patent issued on May 14, 2002, as U.S. Patent 6,385,923 entitled "Transition Support for Flooring Material," otherwise referred herein to as the '923 Patent.

9. In mid- 2002, Roppe decided to add to its product catalog a "subfloor leveler" in various size ranges. At the time, Roppe employees were generally familiar with a Duramax subfloor leveler through Roppe's customers and Johnsonite product catalogs. Neither the Duramax product nor its product catalog identified the '923 patent or even that Duramax had obtained a patent, although some previous Duramax catalogs had identified the product as "patent pending."

10. At or around the same time, Roppe also knew of a prefabricated wooden wedge manufactured and sold by Carpet Shims, an unrelated company. Roppe's own internal sales presentation specifically noted that the Carpet Shim product would be competitive with Roppe's subfloor leveler.

11. Roppe obtained information from its field force as to the pricing of Johnsonite's product and priced its (Roppe's) product just a bit more than Johnsonite's product.

12. Roppe made plans to introduce its subfloor lever at an industry trade show– the Surfaces 2003 convention in Las Vegas, Nevada, in January 2003. The subfloor leveler's design prior to the trade show was essentially a sheet of vinyl four feet long and having a wedge-shaped cross section traverse to its length, where the wedge was either 12 inches wide rising to a height of 3/8 inch or 1/4 inch, or 18 inches wide rising to a height of ½ inch. In its initial design, both large flat sides of the

wedge were given a surface feature of ten ridges to the inch, the wedge being made by a process of extrusion, and the ridges being formed by grooves cut into the extrusion die.

13. While in Las Vegas preparing for the Surfaces 2003 convention, Roppe's President and CEO, Don Gillett ("Gillett'), received a letter from Hochberg, Duramax's patent attorney who had prosecuted the '923 Patent. The letter, dated January 21, 2003, claimed that the Roppe product to be introduced at the Surfaces 2003 convention infringed the '923 patent.

14. Neither Duramax nor its attorney personally examined the Roppe product in its initial design to see if the product in fact infringed the '923 patent before sending the January 21, 2003 cease and desist letter.

15. When Roppe received Duramax's January 21st letter, it immediately pulled its subfloor lever product from the Surfaces 2003 lineup and, while at the show, consulted with its patent attorney to design a product that would not infringe the claims of the '923 patent.

16. The single shipment of the Roppe product that had been made prior to the receipt of the letter was recalled by Roppe, and all of Roppe's stock except one piece of the order was returned and destroyed.

17. Other than the initial shipment, Roppe has never sold any of the original product. Following the recall of the initial design subfloor leveler, Roppe set about designing a new subfloor leveler in a form it believed would not infringe upon the claims of the '923 patent. Roppe's re-design of its product took from January to April 2003 and entailed making a new die with retooling costs in excess of $50,000. The re-designed Roppe product was also a subfloor leveler made of extruded vinyl and having overall dimensions similar to those proposed for the initial design. However, the re-designed product had top and bottom surfaces having roughtly three grooves per

inch, with the grooves created by a wedge-shaped die onto which raised strips had been placed for the purpose of cutting the grooves into the surface of the extrusion during manufacture.

18. Until September 19, 2003, when the instant suit was filed, Duramax said nothing to Roppe indicating that it believed the re-designed Roppe subfloor leveler product infringed the '923 patent.

19. On October 30, 2003, Roppe answered the complaint and filed a counterclaim seeking a declaration that the '923 patent was invalid and unenforceable.

B. '923 Patent and Markman Decision

20. Claim 1 of the '923 patent states as follows:

> 1. A transition support for supporting flooring extending over a floor having an area at a relatively high height, an adjacent area at a relatively low height, a juncture between the relatively high area and the relatively low area, and a difference in the heights between the height of the high area of the floor and the height of the low area of the floor, said transition support comprising an elongate wedge in sheet form, and including:
>
> a relatively thick end having an upper portion, a lower portion and a thickness between the upper portion and lower portion, the thickness being generally equal to said difference in heights between the height of the high area of the floor and the height of the low area of the floor, said thick end being placeable in the juncture adjacent to the high area of the floor:
>
> a relatively thin end opposite said thick end and parallel to said thick end, said thin end being placeable on the low area of the floor remote from the high area of the floor and the juncture; and
>
> a tapering section having a support surface interconnecting the upper portion of said thick end and said thin end, said tapering section defining the wedge for being covered with the flooring, the distance between said thick end and said thin end being at least 30 time the thickness of said thick end for rendering the junction generally unnoticeable to persons walking across said tapering section and for generally preventing the jostling of wheeled vehicles crossing said tapering section, said tapering section having a surface with physical characteristics for retaining adhesives thereon for adhesively securing said support to the floor and to the sheet flooring, and for increasing the friction between said transition support and the floor and the sheet flooring, said physical characteristics comprising at least one surface in said tapered section having ridges parallel to said thick end and said thin end.
>
> 2. A transition support according to claim 1 wherein the thickness of said thick end is at least 3/16 inches and the distance between said thick end and said thin end is at least 12 inches from the thick end.

> 3. A transition support according to claim 1 where in said support is selected from the group consisting of vinyl, polyester, recycled plastic, vinyl mixed with filler, vinyl composition and plastic-like materials.
>
> 4. A transition support according to claim 1 wherein said support is selected from the group consisting of molded vinyl and extruded vinyl.
>
> 5. A transition support according to claim 1 wherein said ridges are less than 0.1 mm in height and where there are at least 10 ridges per inch.
>
> 6. A transition support according to claim 1 wherein said tapering section interconnects the upper portion of said thick end and said thin end at the interior angle of less than 10°, measured at said thin end.
>
> 7. A transition support according to claim 6 wherein said interior angle is less than 5°.
>
> 8. A transition support according to claim 6 wherein said interior angle is 3°.

21. The claims of the '923 patent each include (through dependence upon the only independent claim, Claim 1) two key limitations that the patentee has, over time, argued differentiate the patented invention from the prior art– the wedge's width to height ratio must be at least 30 to 1, *and* at least one flat side of the wedge must be a "surface . . . having ridges" "to hold the adhesive" used to secure the wedge to the floor and to the sheet flooring. In this case, the parties did not dispute that both of these characteristics must be present in order for there to be a finding of infringement regarding any claim in the patent, and the question of infringement centered upon the issue of whether the re-designed Roppe subfloor leveler products have a "surface . . . having ridges."

22. During the *Markman* process, the Court, after an exchange of briefs and a hearing, construed the meaning of a surface . . . having ridges in the following manner:

> [T]he terms "ridges" and "grooves" as used in the patent, should be construed in the context of the patent and the design of the floor shim as "a surface with raised strips or ridges, containing grooves between the strips or ridges, generally having both the ridges and grooves narrow in width."

(Doc. No. 34 at p.8.)

23. Roppe's re-design has a smooth surface with narrow grooves cut into that surface at approximately three per inch, parallel to the thick and thin ends of the wedge. This version of the product is the only version sold commercially by Roppe that has not been recalled or destroyed, and it is the only version of the product at issue in this case.

24. The re-design is made in a vinyl extrusion process. Gerald Glatz ("Glatz"), a former Duramax employee who had been involved with the design of the Duramax subfloor leveling product, testified about the meaning of "ridge" and "groove" to a person of ordinary skill in the art. Glatz explained that a die maker uses cuts in the surface of the die to form "ridges" on the extruded product; to make "grooves," the die's surface would have to be built up with a series of "ridges" to cut grooves into the surface of the extrusion.

25. The Court has ruled that a ridge is a "narrow, raised strip," requiring not only that it cannot be too *wide*, but also that it must be *raised* above the general surface. And what the general surface is in this context is the level that forms the majority of the surface.

26. When Roppe converted its product from the "ribbed" initial design to the re-designed commercial version with grooves, Roppe intentionally left a substantially greater space between grooves than had existed between the original ribs.

27. The '923 patent gives only one example of how "narrow" and how closely spaced ridges must be in order to be functional for purposes of the patent:

> An effective set of ridges has been found to be about 10 ridges per inch and to be less than 0.1 mm in height.

28. The re-design has three areas per inch between grooves of the device, as compared to the ten per inch disclosed in the '923 patent.

29. The testimony from numerous witnesses was clear that the wide area between the grooves of the Roppe device functioned quite differently from the ridges described in the patent. The grooves

in the re-design were placed so far apart, and at such a shallow depth, that the areas between them ceased to function as "ridges" of the described invention did: removing and holding adhesive from the adhesive trowel.

30. Even though tests existed to determine the product's ability to hold adhesive or increase friction, the Plaintiff and its expert had in fact never done *any* testing, including that of Plaintiff's own product.

31. Plaintiff expressly maintained–throughout the trial and in post-trial briefing– that it did not assert infringement under the Doctrine of Equivalents. Duramax's case-in-chief did not contain any testimony showing infringement under the Doctrine of Equivalents, let alone any particularized testimony linking the elements of the patent claims at issue with the Roppe products. In any event, the testimony of the witnesses describing the functional difference between a "ridged" surface like the preferred embodiment depicted in Plaintiff's patent, and a "grooved" surface like the Roppe re-design, demonstrated that the change from ridges to grooves was not insubstantial in that it resulted in a surface texture that lacked the function of the patented texture (improved adhesive retention).

32. Duramax never tested its invention to determine whether the claimed ratio for the height versus the width of the wedge ("at least thirty times the thickness of said thick end") in fact has any advantages over designs not falling within the scope of the patent.

C. Prior Art and Reissue Application

33. U.S. Patent No. 5,581,967 issued to Glatz ("Glatz Patent") on December 10, 1996, having been filed on August 11, 1995. The Glatz patent issued on an application filed before the date of the invention of the '923 patent, which was in or about the fall or 1995. The abstract of Glatz describes it as follows:

> A flooring adapter device for providing a transitional flooring surface between two flooring materials of different heights. The flooring adapter device includes a

> generally planar central portion which is sloped relative to a base portion. The sloped central portion provides a surface having a gradual rise (or descent) between the two flooring surface materials joined by the flooring adapter device.

34. It is undisputed that the Glatz patent was not disclosed by Peter C. Hochberg ("Hochberg"), Duramax's patent attorney, to the to the U.S. Patent and Trademark Office in his prior art disclosure.

35. A second patent at issue is an earlier patent by Pelosi, U.S. 5,212,923, designated as the Tight Lock patent. The Tight Lock patent discloses a cove base which lies along the base of a wall and is not used on or under flooring. The Tight Lock Patent's abstract describes it as follows:

> A prehung gauged cove base is adopted to be secured to a wall base and cooperates with the outer edges of a floor covering. The cove base of the invention has an upper portion which resembles an extruded vinyl straight cove base. Extending downwardly from the rear of said upper portion is a thin walled lower gauging portion. The bottom of the gauging portion is adapted to rest on the floor and to raise the lowermost part of the upper portion above the floor a distance substantially equal to the thickness of the floor covering whereby the edges of the floor covering can be tucked under the upper portion of the cove base. The forward end of the lowermost part of the upper portion if preferably pointed downwardly to better flex around and hold the floor covering. The gauging portion may have one or more continuous longitudinal grooves so that portions can be removed by stripping areas away in order to change the height of the gauge.

36. During the prosecution of the '923 patent, Hochberg cited the Tight Lock patent to the U.S. Patent and Trademark Office in his prior art disclosure. During the five years the Patent Office had the '923 patent under consideration, the Tight Lock patent was neither found to anticipate nor render obvious the invention in the '923 patent.

37. The third relevant patent is U.S. Patent 2,142,832 ("Bell patent"). Hochberg cited the Bell patent to the U.S. Patent and Trademark Office in his prior art disclosure in prosecuting the '923 patent. During the five years the Patent Office had the '923 Patent under consideration, the Bell patent was not found to anticipate or render obvious the invention in the '923 patent.

38. A description of the Bell patent states in pertinent part:

> This invention relates to mat construction and more especially it relates to improved nosing strips such as commonly are applied to one or more margins of flexible, assembled mats, and to improved means for attaching such nosing strips to the mat structure. . .
>
> The chief objects of this invention are to provide a mat construction that may be easily assembled; to provide a mat structure wherein the nosing will not readily separate from the body thereof; and to provide an improved nosing for mats of the character mentioned.

(Def's Ex. H.)

39. On May 14, 2004, Duramax submitted a reissue application regarding the '923 patent with the following reasoning by way of a sworn declaration by the inventor, Pelosi:

> The reissue application is being filed within two years from the grant of the original patent so that broadening claims may be presented. The specification states, in column 4, lines 4-17, that to promote the strength of the adhesive which is used to secure the support on a floor, slight ridges or other physical changes in the bottom surface of the support can be provided. Likewise, ridges are provided on the stop surface of the support. These ridges can be replaces [sic] with groves. In the original application, only ridges were claimed. In this reissue application, grooves[,] in addition to ridges[,] are claimed.

(Doc. No. 101.)

CONCLUSIONS OF LAW

A. Infringement

1, Under 35 U.S.C. § 271:

> (a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

2. Patent infringement, either literal or by the application of the doctrine of equivalents, is a question of fact. *Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc.*, 389 F.3d 1370, 1375 (Fed. Cir. 2004) (citing *RF Del., Inc. v. Pac. Keystne Techs., Inc.*, 326 F.3d 1255, 1266 (Fed. Cir. 2003), *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

3. A patent may be infringed directly or indirectly. Direct infringement results if the accused product is covered by at least one claim of the patent. *Cross Medical Products, Inc. v. Medtronic Sofamore Danke, Inc.*,424 F.3d 1293, 1310 (Fed. Cir. 2005). Indirect infringement results if the defendant induces another to infringe a patent or contributes to the infringement of a patent by another. *Glenayer Electronics, Inc. v. Jackson*, 443 F.3d 851, 858 (Fed. Cir. 2006). As only direct infringement is at issue in this litigation, the Court does not address the issue of infringement under the doctrine of equivalents.

4. In order to establish infringement, Duramax hasthe burden of proving that every limitation of the patent is found in the Roppe re-design. This is often referred to as the "all limitations rule." *See Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1308-10 (Fed. Cir. 2002) (to prove infringement–either literally or by doctrine of equivalents–patentee must "show that the accused device contains every limitations in the asserted claims." (quoting *Mas-Hamilton Group v. LaGard, Inc., 156 F.3d 1206, 1211 (Fed. Cir. 1998)*) and *Johnston v. Ivac Corp.*, 885 F.2d 1574, 1577 (Fed. Cir. 1989) (infringement of a patent exists when every limitation recited in the claim is found in the accused device). Duramax failed to demonstrate that the Roppe wedge contained every limitation recited in the claims of the '923 patent when the claims are interpreted properly with reference to use of the terms by the patentee, because Durmax has failed to show that the re-designed Roppe products, the only products commercially sold by Roppe under consideration in this action, have a "surface . . . having ridges" as is required by each and every claim of the '923 patent.

5. An infringement analysis requires both claim interpretation and then comparison of the claims to the accused device or process. *Markman v. Westview Instruments*, 52 F.3d 967, 976 (Fed. Cir. 1995).

6. The words of the claims are given their ordinary and customary meaning as understood by a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*), *cert. denied*, 126 S.Ct. 1332 (2006).

7. As previously noted, pursuant to *Markman*, the Court interpreted the meaning of "ridges" as used in the patent as required by Claim 1 and all other claims of the '923 patent in this way:

> [T]he terms "ridges and "grooves" as used in the patent, should be construed in the context of the patent and the design of the floor shim as "a surface with raised strips or ridges, containing grooves between the strips or ridges, generally having both the ridges and grooves narrow in width.

(Doc. No. 34 at p.8.)

8. To the extent the Court relied on the layman's dictionaries offered by Duramax at the time of the *Markman* hearing, it now reconsiders the decision to rely solely on those dictionary definitions to interpret the words of the '923 patent's claims. Though justifiable under the Federal Circuit law at the time, *see e.g. Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202-05 (Fed. Cir. 2002), *cert. denied*, 538 U.S. 1058 (2003), it is apparent that this Court must look to the use of the words "grooves," "ridges" and "surface" as they are used in the patent specification and as they are understood by persons of ordinary skill in the art, in order to fully give meaning to the claims. *Phillips*, 415 F.3d at 1312-13.

9. The patent specification reveals the patentee identified ridges *or* grooves which might be used to create surface texture. The patent claims, however, only recite ridges. Where the specification reveals an intentional disclaimer or disavowal of claim scope by the inventor, "the inventor's intention, as expressed in the specification, is regarded as dispositive." *Phillips*, 415 F.3d at 1316. This disavowal is further supported by the testimony of Glatz, who, by his involvement in creating the subfloor lever with Pelosi and his testimony regarding his many years in business of creating flooring products at Duramax and other businesses, demonstrates that he is a person skilled

in the relevant art. Glatz testified that in the manufacture of extruded products, such as the subfloor leveler, grooves are formed in the product by building up material on the die that cuts into the extruded surface, whereas ridges are made in the surface of the product by grooves cut into the die prior to extrusion.

10. It is apparent that a person of ordinary skill would view a "surface . . . having ridges" as different from a "surface . . . having grooves." The interpretation of the claim is thus consistent with the ordinary meaning of the terms as that term is understood by persons of ordinary skill in the art. Accordingly, the exclusion of grooves in the patent claims, when grooves were indicated as a substitute for ridges in the specification, evinces a waiver by the patentee of grooves.

Duramax failed to provide affirmative evidence of what the claims of the '923 patent would mean to one of ordinary skill in the art. At trial, Plaintiff's expert, Marvin Himmelein ("Himmelein"), a mechanical engineer, used dictionaries and his own understanding of the claim terms to interpret the patent, rather than reading "the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Although a well-known and respected engineer, Himmelein did not indicate specialized knowledge of the extruded flooring field nor did he indicate that his analysis of the words of the claim came from any source other than dictionaries provided to him by Plaintiff's counsel.

11. The Court's *Markman* interpretation of "ridges" as "narrow raised strips" comports with how the term is used throughout the patent and the meaning of the term to those skilled in the relevant art.

12. The patent states that a preferred frequency of ridges would be 10 ridges per inch. This description supports the interpretation that the ridges must be narrow and also provides a reference as to what would be considered "narrow." Himmelein's testimony that "narrow" should be determined according to the width of the ridge compared to its length cannot be supported by the

patent. Himmelein's definition would render the patent indefinite under 35 U.S.C. § 112 because the patent does not prescribe how long a device covered by the patent must be and, thus, the definition of the term would be purely subjective and would depend on where the installer cuts the product.

B. Validity and Enforceability

13. A registered patent is presumed valid. 35 U.S.C. § 282. The burden is on the party challenging validity to establish by clear and convincing evidence that the statutory presumption is invalid. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1375 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987). The challenge in overcoming the statutory presumption "is more difficult to satisfy when prior art references have been presented to the PTO." *Syntex v. Apotex, Inc.*, 407 F.3d 1371, 1383 (Fed. Cir. 2005) (citation omitted).

14. To anticipate a claim, each and every element in the claim must be present in a single item of prior art. One cannot combine two or more items of prior art to prove anticipation. An element can be present in a piece of prior art either because it is expressly disclosed or inherently present. To establish inherency, the evidence must make clear that the missing descriptive matter is necessarily present in the reference. *Schering Corp. v. Geneva Pharms, Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003).

15. To declare a patent invalid based on obviousness a defendant must prove that the claimed subject matter would have to have been obvious to one of ordinary skill in the art at the time the invention was made. 35 U.S.C. § 103(a). To establish obviousness a person of ordinary skill in the art may combine two or more items of prior art. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). However, there must be a showing of suggestion or motivation to modify the teachings of that reference to the claimed invention. In addition, consideration must be given to: (1) the scope and content of the prior art relied on by the defendant; (2) the difference(s) between each claim of the

'923 patent and the prior art; (3) the level of ordinary skill in the art at the time the invention of the '923 patent was made; and (4) objective factors indicating non-obviousness including commercial success of the product covered by the invention and copying by others of the invention claims in the '923 patent. *Graham v. John Deere*, 383 U.S. 1, 17-18 (1966); *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 662-63 (Fed. Cir. 2000).

16. The first basis upon which the Defendant seeks a finding of invalidity rests upon the prior art. It is undisputed that Duramax did not disclose the Glatz patent to the patent office. Mr. Jay Campbell ("Campbell"), Roppe's expert, testified that the Glatz patent either completely disclosed the invention of the claims at issue or rendered those claims obvious.

17. Each element of Claim 1 of the '923 patent can be found in the Glatz patent. It discloses an elongate wedge transition member (10), in sheet form (column 3, line 33), including a thick end (60) having an upper surface (20) and a lower surface (30) with a thickness (T) between the upper surface (20) and the lower surface (30). The transition device further includes a thin end (42) opposite the thick end (60) and a tapering section (TA) to render an "unnoticeable" junction between two flooring materials of differing heights, (column 2, line 29 and lines 42-45). Column 1, line 58 and column 2, line 52, is a clear indication that the device of the Glatz patent was intended to go "unnoticed."

18. Further, although the distance between the thick and thin ends of the specific embodiment shown in the Glatz patent are not 30 times the thickness of the thick end, the Glatz patent discloses that variations may be made to accommodate varying flooring heights at column 5, lines 24-26. It is apparent that a variation or modification to one having ordinary skill in the art would encompass the length-to-height ratio, as admitted by Pelosi in his trial testimony.

19. Although the Glatz patent does not mention explicitly the use of grooves or ridges on the surfaces of the transition member, it was well known to persons of ordinary skill in the art at the time of the filing of the '923 patent to use such features in flooring materials.

20. The Glatz patent was also the basis for the final rejection of the continuation application of the '923 patent, application Ser. No. 10/102,445, which application is currently on appeal at the U.S. Patent Office. The similarity between the claims of the continuation application and the claims at issue in this case are striking. The claims of the continuation application can be seen in Defendant's Exhibit B and reveal that claim 12, for example, is essentially claim 1 of the patent in suit, without the limitation as to the surface characteristics of the product.

21. The Bell patent, however, was raised by the examiner during the examination of the '923 patent and was discussed in the opinion of the Board of Appeals. That opinion acknowledged the examiner's view that the Bell patent showed all of the limitations of the '923 invention except the limitation that "the distance between said thick end and said thin end being at least 30 times the thickness of said thick end." The Board concluded that the invention was patentable on the basis that there was no evidence to contradict the inventor's representation to the board that the 30 to 1 ratio was not obvious to persons of ordinary skill. (Defendant's Ex. A, p. 259.) The opinion of the Board of Appeals in which the claims of the '923 patent were allowed over the Bell patent rested entirely on the inventor's perceived representation that the 30 to 1 ratio gave the unique results claimed.

22. At trial, Mr. Pelosi testified that he derived the original dimensions for his invention from standard architectural specifications for pathway inclines at the time. He further testified that the specific 30 to 1 ratio was within the scope of standard architectural choice at the time of the invention.

23. Pelosi and Carmen Pastore ("Pastore"), Duramax's President, both testified that ratios both smaller and greater than the "at least 30-1" limitation set out in the claims resulted in achieving the goal of the invention. Both Pelosi and Pastore testified that Hochberg assisted in selecting the numerical ratio for inclusion into the patent. Duramax does not sell and never has sold a subfloor leveler with precisely the 30-1 ratio described in the patent and, in fact, sells a subfloor leveler which Duramax claims has all the same advantages as its other subfloor levelers, but has a 24 to 1 width to height ratio.

24. The Bell patent discloses a "nosing strip" applicable to the margins of a mat to transition between the floor under the mat and the surface of the mat. The nosing strip taught is in a wedge shape and has a surface texture of ridges on the upper surface. The Bell patent does not specifically teach a dimension of greater than 30-1 for the height to width ratio of the disclosed wedge, but that dimension would be within the scope of obvious design choice, given the architectural specifications testified to by Pelosi.

25. The opinion of the Board of Patent Appeals distinguished the Bell patent solely on the basis of the novelty of the height to width ratio, emphasizing that:

> In the absence of evidence to the contrary, it is our view that the only suggestion to modify the Bell nosing strip in the manner proposed by the Examiner is found in the luxury of hindsight afforded one who first viewed the appellant's disclosure.

(Defendant's Ex. A., p. 259.)

26. Testimony at trial revealed that the "absence of evidence to the contrary" was the direct result of the omission regarding the architectural specifications and background thereto. It is reasonable to conclude that, had the Board been aware of these well-known architectural specifications, the Board would have concluded that the Bell patent rendered the '923 claim obvious.

27. Campell's expert testimony was that the Bell patent either completely disclosed the invention of the claims at issue, or rendered those claims obvious.

28. The Tight Lock patent, like the Bell patent, was disclosed to the Patent office during the prosecution of the '923 patent and it was not found to anticipate or render obvious the invention in the '923 patent.

29. It is clear to this Court that the Tight Lock patent alone or in combination with any other prior art does not render the '923 patent obvious. First, there is no showing of a suggestion or motivation to combine the Tight Loch patent with any prior art. As the Defendant has failed to establish by clear and convincing evidence that the Tight Lock patent alone or in combination renders the '923 patent invalid, Defendant's position on this issue is not well taken.

30. The Court finds that two of the three cited prior art patents, the Bell patent and Glatz patent, render each of the claims of the '923 patent invalid pursuant to 35 U.S.C. § 102 or obvious pursuant to 35 U.S.C. § 103. In that regard, the Court notes that the use of ridges on flooring products to promote adhesive retention, and an incline in the rage of 30-1 were both shown at trial to be well known design options at the time of the '923 application. Further, the court notes that Pelosi repeatedly admitted during the prosecution of his patent that he did not claim as part of his invention the subflooring, the overlying flooring or the adhesives used to secure his subfloor leveler. The examiner confirmed this point in the notes regarding an interview summary with Hochberg. (Defendant's Ex.A, p. 70.) As such, those qualities cannot serve to avoid a finding of obviousness or anticipation. In the absence of these non-limiting provisions, the Pelosi invention is a wedge having dimensions common in architectural specifications and having a surface feature--ridges– that were common in the art.

31. The '923 patent is also invalid because the "at least 30 times the thickness of the thick end" limitation of the only independent claim was added without knowledge by the inventor, Pelosi, of any particular benefit or value to be obtained from that boundary. A failure to disclose that specific advantages argued by an applicant in order to distinguish its invention from prior art having empirical basis may render a patent unenforceable, even if the particular information, or lack thereof, is not set forth in the claims. *Perdue Pharma, L.P. v. Endo Pharm., Inc.*, 438 F.3d 1123, 1132-33 (Fed. Cir. 2006).

32. The Court does not find invalidity based on inventorship. "An inventor may solicit the assistance of others when perfecting the invention without 'losing' any patent rights." *Trovan, Ltd. v. Sokymat SA*, 299 F.3d 1292, 1302 (Fed. Cir. 2002). There was no testimony that Glatz in any way conceived the invention of the '923 patent. "[T]o be a joint inventor an individual must make a contribution to the conception of the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention." *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473 (Fed. Cir. 1997).

33. Having considered the testimony of Messrs. Glatz, Hochberg and Pelosi, the Court does not find the evidence rises to clear and convincing evidence on inventorship by either Glatz or Hochberg. To be sure, Hochberg and Glatz assisted Pelosi in refining description, but the evidence does not sustain a finding that either of these individuals rise to the level of inventor alongside Pelosi.

CONCLUSION

Based upon the foregoing, the Court finds the Plaintiff has not established infringement of its '923 patent by a preponderance of the evidence, therefore, Defendant is entitled to judgment on Plaintiff's claim of infringement. As the Court has determined a lack of infringement by the

Defendant, the Plaintiff's request for a finding of willful infringement, injunctive relief and monetary damages are denied as moot. Accordingly, judgment is entered for the Defendant on Plaintiff's claim for patent infringement.

Based upon the Defendant's counterclaim for a determination of invalidity and/or unenforceability, the Court finds in favor of Defendant based upon the prior art as contained the Bell and Glatz patents as well as the thickness limitation but rejects Defendant's claim for invalidity on the aspects of inventorship. Accordingly, the Court finds in favor of Defendant on its counterclaim and finds the '923 patent, U.S. Patent 6,385,923, invalid and unenforceable.

Each side is to bear its own costs.

IT IS SO ORDERED.

S/ *David A. Katz*
DAVID A. KATZ
U. S. DISTRICT JUDGE